ABSTRACT OF THE DISCLOSURE

A head portion for counterbalancing a random orbital machine including a first element adapted for connection to a drive means for the machine and to an abrasive pad assembly. The drive means is rotatable about a first axis of rotation and the abrasive pad assembly is rotatable about a second axis of rotation that is parallel to the first axis of rotation and lying within a plane common with the first axis. The head portion also includes a second element detachably connected to the first element. The first and second elements are configured to at least substantially counterbalance portions of the abrasive pad assembly not disposed concentrically of the first axis of rotation and forces to which the abrasive pad assembly is exposed during use as a result of the abrasive pad assembly engaging with a work surface.